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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,920	08/20/2003	John M. Jones	11283/09049	9299

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EXAMINER	
MANAF, ABDUL	
ART UNIT	**PAPER NUMBER**
3635	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/645,920	JONES ET AL.	
	Examiner	Art Unit	
	Abdul Manaf	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *26 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *44-73* is/are pending in the application.

4a) Of the above claim(s) *1-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *44-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In response to election filed on October 26th, 2005 applicant has elected the invention of Group IV, Claims 44 – 73. Applicant has withdrawn claims 1 – 43. Claims 44 – 73 are pending based on the following office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 44 – 46, 53, 56, 57, 59, 60 – 62, 68, 71 and 72 are rejected under 35 U.S.C. 102(b) as being anticipated by the U.S. Patent No. 4,963,408 to Huegli.

In regard to claim 44, Huegli discloses a method for forming a composite liner panel (Fig. 1) for a thermal insulated wall structure (column 4, lines 63-65; column 5, lines 14-17) comprising at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62) and at least one structural polymer resin layer (column 3, lines 60-63) disposed coplanar (Figs. 1-3) to the barrier layer; and a thermal insulated core layer (Fig. 1: 12, column 5, lines 14-17) bonding at least one weather resistant (gas impermeable) barrier layer to at least one structural polymer layer thereby forming a laminate liner panel attaching the laminate liner panel to the thermal insulating core layer (See Figs. 1-3; column 6, lines 62-67; column 7, lines 46-52).

In regard to claim 45, Huegli discloses a method for forming a composite liner panel comprising heating (column 4, lines 4-9) at least one weather resistant (gas

impermeable) barrier layer and at least one structural polymer resin layer and compressing (column 4, lines 4-9) both layers together.

In regard to claim 46, Huegli discloses a method for forming a composite liner panel comprising cooling laminate (column 8, lines 47-49).

In regard to claim 53, Huegli teaches a method for forming a composite liner panel comprising at least one gas impermeable barrier layer is a metal foil (column 2, lines 31-33).

In regard to claim 56 and 57, Huegli teaches a method for forming a composite liner panel comprising a structural polymer resin layer comprising fibers of glass (column 2, lines 31-36).

In regard to claim 59 and 60, Huegli teaches a method for forming a composite liner panel comprising an insulated, gas impregnated polymeric foam core layer (Fig. 1: 12; column 4, lines 63-68; column 5, lines 1-6) comprising polyurethane foam (column 1, lines 37-40).

In regard to claim 61, Huegli discloses a method for forming a composite liner panel (Fig. 1) for a thermal insulated wall structure (column 4, lines 63-65; column 5, lines 14-17) comprising heating and compressing (column 4, lines 4-9) at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62) and at least one structural polymer resin layer (column 3, lines 60-63) disposed coplanar (Figs. 1-3) to the barrier layer; and a thermal insulated core layer (Fig. 1: 12, column 5, lines 14-17) bonding at least one weather resistant (gas impermeable) barrier layer to at least one structural polymer layer thereby forming a laminate liner panel attaching the

laminate liner panel to the thermal insulating core layer (See Figs. 1-3; column 6, lines 62-67; column 7, lines 46-52).

In regard to claim 62, Huegli discloses a method for forming a composite liner panel comprising cooling laminate (column 8, lines 47-49).

In regard to claim 68, Huegli teaches a method for forming a composite liner panel comprising at least one gas impermeable barrier layer is a metal foil (column 2, lines 31-33).

In regard to claim 71 and 72, Huegli teaches a method for forming a composite liner panel comprising a structural polymer resin layer comprising fibers of glass (column 2, lines 31-36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 47 – 51, 63 – 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent No. 4,963,408 to Huegli.

In regard to claim 47, while Huegli discloses a method for forming a composite liner panel comprising a structural polymer resin layer, he does not disclose a thermosetting structural polymer resin layer. However, He discloses the bonding material layer as a thermosetting resin layer (column 7, lines 46-52).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a thermosetting structural polymer resin layer for panel rigidity and molding at the corners of a box or room comprising liner panels in order to withstand a required shape.

In regard to claim 48, Huegli discloses a method for forming a composite liner panel comprising at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62) and at least one structural polymer resin layer (column 3, lines 60-63) bonded by an adhesive (column 7, lines 46-52).

In regard to claim 49, Huegli discloses a method for forming a composite liner panel comprising at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

In regard to claims 50 and 51, Huegli discloses a method for forming a composite liner panel comprising a gas impermeable barrier layer (Fig. 1: 14) and a polyester layer (Fig. 2: 16) and at least one structural polymer resin layer (column 3, lines 60-63) bonded by an adhesive (column 7, lines 46-52). While Huegli teaches outer (barrier) layer as film of acrylate co-polymer (column 2, lines 14-16), he does not discloses a metallized polyester film.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a metalized polyester film as a gas impermeable barrier layer bonded with at least one structural polymer resin layer for electro conuductivity in order to dissipate heat by conduction.

In regard to claim 63, Huegli discloses a method for forming a composite liner panel comprising at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62) and at least one structural polymer resin layer (column 3, lines 60-63) bonded by an adhesive (column 7, lines 46-52).

In regard to claim 64, Huegli discloses a method for forming a composite liner panel comprising at least one weather resistant (gas impermeable) barrier layer (Fig. 1: 14; column 4, lines 53-62). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

In regard to claims 65 and 66, Huegli discloses a method for forming a composite liner panel comprising a gas impermeable barrier layer (Fig. 1: 14) and a polyester layer (Fig. 2: 16) and at least one structural polymer resin layer (column 3, lines 60-63) bonded by an adhesive (column 7, lines 46-52). While Huegli teaches outer (barrier) layer as film of acrylate co-polymer (column 2, lines 14-16), he does not discloses a metallized polyester film.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a metalized polyester film as a gas impermeable barrier layer bonded with at least one structural polymer resin layer for electro conuductivity in order to dissipate heat by conduction.

Claims 52, 54, 55, 58, 67, 69, 70 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent No. 4,963,408 to Huegli in view of the U. S. Patent No. 6,444,073 to Reeves et al.

In regard to claim 52, while Huegli discloses a method for forming a composite liner panel comprising a gas impermeable barrier layer (Fig. 1: 14), he does not disclose a metallized polypropylene film.

However, Reeves discloses at least one gas impermeable barrier layer as metallized polypropylene film (Reeves, Fig. 1: 24, Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a metalized polypropylene film as a gas

impermeable barrier layer for electro conuductivity in order to dissipate heat by conduction.

In regard to claims 54 and 55, Huegli discloses a method for forming a composite liner panel comprising a second structural polymer resin layer (Fig. 1: 20) coplanar and opposite side (Figs. 1-3) to at least one gas impermeable barrier layer having a second adhesive layer (column 7, lines 46-52) between at least one metallized polyester film and second structural polymer resin layer.

In regard to claim 58, while Huegli discloses a method for forming a composite liner panel comprising an adhesive layer (column 7, lines 46-52) coplanar with and intermediate to second structural polymer resin layer and insulated core layer (Fig. 1: 12, column 5, lines 14-17). However Huegli does not specifically disclose a scrim layer, polyester and vinyl ester may be used as a scrim layer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a scrim layer formed by an adhesive for adhering a second structural polymer resin layer and insulated core layer in order to have a thicker and more effective gas and moisture impermeable barrier layer for severe weather conditions.

In regard to claim 67, while Huegli discloses a method for forming a composite liner panel comprising a gas impermeable barrier layer (Fig. 1: 14), he does not disclose a metallized polypropylene film.

However, Reeves discloses at least one gas impermeable barrier layer as metallized polypropylene film (Reeves, Fig. 1: 24, Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a metalized polypropylene film as a gas impermeable barrier layer for electro conuductivity in order to dissipate heat by conduction.

In regard to claims 69 and 70, Huegli discloses a method for forming a composite liner panel comprising a second structural polymer resin layer (Fig. 1: 20) coplanar and opposite side (Figs. 1-3) to at least one gas impermeable barrier layer having a second adhesive layer (column 7, lines 46-52) between at least one metallized polyester film and second structural polymer resin layer.

In regard to claim 73, while Huegli discloses a method for forming a composite liner panel comprising an adhesive layer (column 7, lines 46-52) coplanar with and intermediate to second structural polymer resin layer and insulated core layer (Fig. 1: 12, column 5, lines 14-17). However Huegli does not specifically disclose a scrim layer, polyester and vinyl ester may be used as a scrim layer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huegli by using a scrim layer formed by an adhesive for adhering a second structural polymer resin layer and insulated core layer in order to have a thicker and more effective gas and moisture impermeable barrier layer for severe weather conditions.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdul Manaf whose telephone number is 571-272-1476. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AM A.M.

03/01/2006

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